



Light Weight, Mobile Tourist Huts

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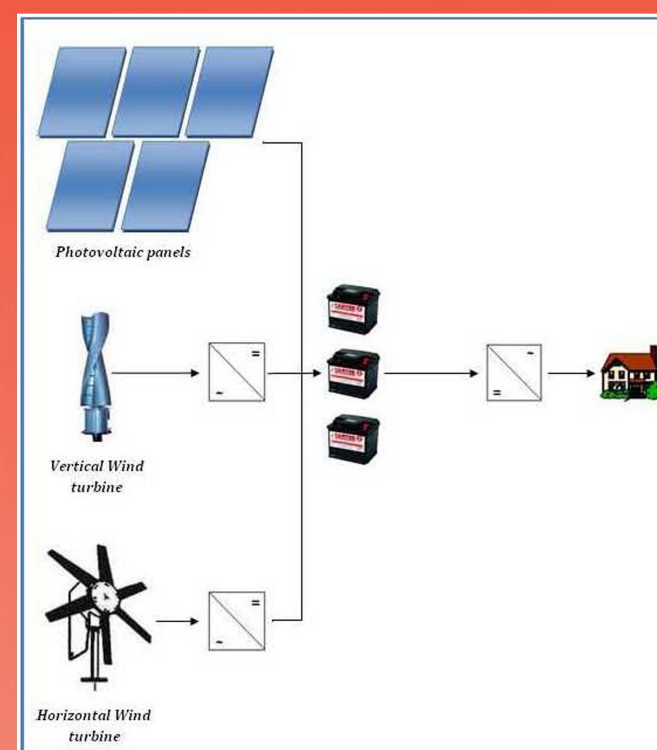
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Sustainable Tourism

Stand-alone Hybrid Energy System

ARTEK has successfully installed a few so called 'hybrid energy system' in different localities in Greenland such as Assaqtuaq, Uummannaq, Sisimiut and Sarfanguaq. They all work very well. The system in Sarfanguaq is a wind turbine of 6 KW. This kind of system is composed of multiple generation source, usually solar panels and wind turbines, storage (battery bank), power conditioning and system control. This hybrid system can be small scale and totally stand-alone and therefore perfect for the tourist hut. Such a system has been installed at a full-scale model of the hut in Greenland.



Grey waste water treatment

Considering the mobile tourist hut is not connected with any local infrastructures and the restriction of the arctic environment, infiltration system with peat and biological sand filter will be used to treat grey waste water.



Composting toilet

The cold climate limits the choices to treat waste water. The remote location is another big challenge, where no modern infrastructures as water supply, sewerage or electricity are available and therefore maintenance of toilets and treatment systems hardly exist. Hence composting toilets without urine diversion could be an option. To compost human excreta, dry matter content must be increased. Addition of bulking material would be necessary and heating produced by the hybrid system can provide heat for the toilet to complete the process.



Waste Treatment and Water Supply

The idea is that the tourists take away their own solid waste. All the huts will be placed near water source to get water.

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